

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the above-identified application:

Listing of Claims

1. (Currently Amended) Suturing instrumentation for suturing tissue, comprising:
 - a malleable needle ~~portion~~ having a sharpened distal tip and constructed and arranged to deliver a length of suture material to the tissue;
 - a handheld instrument having a passageway configured to receive the malleable needle and having a distal end terminating in a nonlinear portion having a first radius; and the passageway having a linear slot in a side wall proximate to the distal end of the handheld instrument to receive the malleable needle portion within the passageway so that the malleable needle may be pushed through the passageway and into tissue; and
 - a force-supplying structure configured for applying a force to the malleable needle ~~portion~~,
 - wherein the force-supplying structure includes a distal end capable of pushing the malleable needle ~~portion~~ through the nonlinear portion, such that when the distal end of the handheld instrument is positioned proximate to the tissue to be sutured and the malleable

needle ~~portion~~ is pushed by the distal end of the force-supplying structure through the nonlinear portion, the malleable needle ~~portion~~ is deformed, thereby causing the malleable needle ~~portion~~ to deliver the suture material to the tissue.

2. (Original) The suturing instrumentation of Claim 1, wherein the handheld instrument includes a proximal insertion opening to receive the distal end of the force-supplying structure.

3. (Currently Amended) The suturing instrumentation of Claim 1, further comprising a slit narrower than the linear slot in the side wall, wherein the slit extends from the linear slot to a distal end of the passageway and through the nonlinear portion ~~wherein the distal end of the handheld instrument includes an elongated slot to receive the malleable needle portion from the side;~~

the slot transitioning to a narrower slit along the nonlinear portion; enabling the suture material to extend from the slit as the needle ~~portion~~ is pushed through the nonlinear portion.

4. (Currently Amended) The suturing instrumentation of Claim 1, wherein the malleable needle ~~portion~~ has a degree of spring back of from 0 to about 100 percent.

5. (Currently Amended) The suturing instrumentation of Claim 4, wherein the malleable needle ~~portion~~ has a degree of spring back of from 0 to about 10 percent.

6. (Currently Amended) The suturing instrumentation of Claim 4, wherein the malleable needle ~~portion~~ has a degree of spring back of from about 90 to about 100 percent.

7. (Currently Amended) The suturing instrumentation of Claim 1, wherein the malleable needle ~~portion~~ comprises a Nitinol needle.

8. (Original) The suturing instrumentation of Claim 7, wherein the Nitinol needle is formed into a curved shape having a radius substantially equal to the first radius, further wherein the Nitinol needle is forcibly straightened when located in the handheld instrument and substantially regains the curved shape after leaving the handheld instrument.

9. (Original) The suturing instrumentation of Claim 7, wherein the Nitinol needle is substantially linear in shape, further wherein the Nitinol needle is forcibly curved when forced through the nonlinear portion of the handheld instrument and substantially regains the linear shape after leaving the handheld instrument.

10. (Currently Amended) Suturing instrumentation for suturing tissue comprising:

a malleable needle ~~portion~~ having a sharpened distal tip and constructed and arranged to deliver a length of suture material to the tissue;

a handheld instrument having a passageway configured to receive the malleable needle and having a distal end terminating in a nonlinear portion having a first radius; and the passageway having a linear slot in a side wall proximate to the distal end of the handheld instrument to receive the malleable needle portion within the passageway so that the malleable needle may be pushed through the passageway and into tissue; and

a force-supplying structure configured for applying a force to the malleable needle portion,

wherein the force-supplying structure includes a distal end capable of pushing the malleable needle ~~portion~~ through the nonlinear portion, such that when the distal end of the handheld instrument is positioned proximate to the tissue to be sutured and the malleable needle ~~portion~~ is pushed by the distal end of the force-supplying structure through the nonlinear portion, the malleable needle portion is deformed, thereby causing the malleable needle portion to deliver the suture material to the tissue; and

a jaw pivotally coupled to the distal end of the handheld instrument for holding tissue as the malleable needle portion and suture material enters into the tissue.

11. (Currently Amended) The suturing instrumentation of Claim 10, wherein the jaw includes an aperture, slot, or cavity to receive the deformed needle portion.

12. (Original) The suturing instrumentation of Claim 10, wherein the handheld instrument includes a proximal insertion opening to receive the distal end of the force-supplying structure.

13. (Currently Amended) The suturing instrumentation of Claim 10, further comprising a slit narrower than the linear slot in the side wall, wherein the slit extends from the linear slot to a distal end of the passageway and through the nonlinear portion wherein the distal end of the handheld instrument includes an elongated slot to receive the malleable needle portion from the side;

~~the slot transitioning to a narrower slit along the nonlinear portion;~~ enabling the suture material to extend from the slit as the needle portion is pushed through the nonlinear portion.

14. (Currently Amended) The suturing instrumentation of Claim 10, wherein the malleable needle portion has a degree of spring back of greater than 0 to about 100 percent.

15. (Currently Amended) The suturing instrumentation of Claim 14, wherein the malleable needle ~~portion~~ has a degree of spring back of greater than 0 to about 10 percent.

16. (Currently Amended) The suturing instrumentation of Claim 14, wherein the malleable needle ~~portion~~ has a degree of spring back of from about 90 to about 100 percent.

17. (Currently Amended) The suturing instrumentation of Claim 10, wherein the malleable needle ~~portion~~ comprises a Nitinol needle.

18. (Original) The suturing instrumentation of Claim 17, wherein the Nitinol needle is formed into a curved shape having a radius substantially equal to the first radius, further wherein the Nitinol needle is forcibly straightened when located in the handheld instrument and substantially regains the curved shape after leaving the handheld instrument.

19. (Original) The suturing instrumentation of Claim 17, wherein the Nitinol needle is substantially linear in shape, further wherein the Nitinol needle is forcibly curved when forced through the nonlinear portion of the handheld instrument and substantially regains the linear shape after leaving the handheld instrument.

20. (Original) The suturing instrumentation of Claim 10, further including a manually operated control enabling a user to open and close the jaw.

21. (Currently Amended) A suture needle adapted for use with a handheld instrument defining an axis and having an off-axis distal end, the needle comprising:

a length of material having a sharpened distal tip and constructed and arranged to deliver a length of suture material; and

the material of the needle being malleable, such that when the needle is pushed through the handheld instrument, it ~~[[elastically]]~~ inelastically deforms in accordance with the off-axis distal end and remains in a deformed condition after being pushed through the hand held instrument.

22. (Original) The suture needle of Claim 21, wherein the length of material includes one or more flat sides to resist rotation as the needle passes through the off-axis portion of the handheld instrument.

23. (Original) The suture needle of Claim 22, wherein the length of material includes opposing flat sides.

24. (Original) The suture needle of Claim 21, wherein the length of material includes one or more indented portions to assist with deformation as the needle passes through the off-axis portion of the handheld instrument.

25. (Original) The suture needle of Claim 21, wherein the length of the needle is about 15 mm or less.

26-32. (Canceled)

33. (Currently Amended) A method for suturing, comprising the steps of:
providing a malleable needle ~~portion~~ having a sharpened distal tip;
positioning the needle ~~portion~~ in a passageway of a handheld instrument by inserting the needle through a linear slot in a side wall of the passageway proximate to a distal end of the handheld instrument;

providing a suture material to be delivered by the needle ~~portion~~; and
using a push member to push the needle ~~portion~~ in the handheld instrument, the needle ~~portion~~ upon exiting the handheld instrument penetrating the tissue being sutured and delivering the suture material to the tissue being sutured.

34. (Currently Amended) The method of Claim 33, wherein the distal end of the handheld instrument has a distal end terminating terminates in a nonlinear portion, and the needle ~~portion~~ is deformed as it traverses the nonlinear portion.

35. (Currently Amended) The method of Claim 33, wherein the needle ~~portion~~ is substantially straight when in at least a portion of the passageway of the handheld instrument, curved when in the distal end, and curved upon exiting the distal end of the handheld instrument.

36. (Currently Amended) The method of Claim 33, wherein the needle ~~portion~~ is substantially straight when in at least a portion of the passageway of the handheld instrument, curved when in the distal end, and substantially straight upon exiting the distal end of the handheld instrument.

37. (Currently Amended) The method of Claim 33, wherein the malleable needle ~~portion~~ has a degree of spring back of greater than 0 to about 100 percent.

38. (Currently Amended) The method of Claim 37, wherein the malleable needle ~~portion~~ has a degree of spring back of greater than 0 to about 10 percent.

39. (Currently Amended) The method of Claim 37, wherein the malleable needle ~~portion~~ has a degree of spring back of from about 90 to about 100 percent.

40. (Currently Amended) The method of Claim 33, wherein the malleable needle ~~portion~~ comprises a Nitinol needle.